

For: State and County Offices**Electrical Requirements for Uninterruptible Power Supplies (UPS)****Approved by:** Deputy Administrator, Management**1 Overview****A****Background**

As part of the USDA CCE Network Server Deployment initiative, many changes are occurring and actions are required.

Refer to the following table for standard electrical requirements that must be implemented before the installation of servers and UPS.

IF...	THEN...
the primary power source is lost	the UPS will ensure that computers continue running for a short period of time and provide protection from power surges.
the device senses a loss of power while using a computer on the network	there is time to save data and exit before the battery runs out.
when power surges occur	the UPS intercepts the surge so that the computers on the network are not damaged.

B**Purpose**

This notice provides:

- authorization to install 30-AMP dedicated circuits in all server sites
- UPS electrical requirements
- guidance for acquiring electrical work
- procedures for reimbursement of costs associated with UPS electrical work.

Continued on the next page

Disposal Date

December 1, 2001

Distribution

State Offices; State Offices relay to County Offices

Notice IRM-319

1 Overview (Continued)

C

Contact

Direct questions about this notice to Sandi Davenport, ITSD, 202-720-1700.

2 Electrical Requirements

A

Specifications

30-AMP dedicated circuits are required for use by the UPS. Refer to Exhibit 1, CCE Electrical Requirements Worksheet, for additional electrical requirements.

Note: Most of the dedicated circuits installed at the time of the LWV wiring installation were 20-AMP which are **not** sufficient to handle the new equipment.

B

Deadline Date

The servers and UPS will be installed in all hub sites first. Therefore, electrical work for the UPS must be completed at these sites before server and UPS installation.

Deadline for completing electrical work at all hub sites is March 31, 2001. Electrical work for the remaining server sites should begin after hub sites have been completed.

3 Guidance for Electrical Work

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Responsibility

Every State has a State Server Deployment Team with Computer Specialists from FSA, NRCS, and RD. The team is currently developing their own State's CCE State Network Server Deployment Plan. One member of the team, according to the plan, will be designated with the responsibility of physical site preparation, including coordinating the installation and verifying the electrical requirements for the UPS.

Note: The CCE State Network Server Deployment Plan Guide is on the website <http://helpdesk.itc.nrcs.usda.gov/newsflash/>.

B

Acquiring Certified Electricians

The team member responsible for the electrical requirements must ensure that:

- States procure local certified electricians to verify that each site meets the electrical requirements
 - the installation of dedicated circuits in all hub sites are completed by local certified electricians no later than March 31
 - the installation of dedicated circuits in all remaining server sites are completed by local certified electricians
 - written bids are obtained for electrical work at each site
 - the lowest bid at each site is selected for completing the electrical work.
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4 Associated Costs

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UPS Installation Costs

Installation of the UPS should be completed using non-Federal funds paid by the County Office or by State Office check issued on behalf of the County Office. All costs incurred will be reimbursed by the CCE Project through a national agreement between FSA and the CCE Project.

BUD will use the documentation provided to the CCE Project to allot funds back to States for costs incurred by FSA.

B

Submitting Documents for Reimbursement

State Offices shall:

- use local County non-Federal administrative funds to complete the electrical work
- maintain copies of all associated documentation used to procure the work until the State is reimbursed
- follow the guidelines for reimbursement according to the CCE State Network Server Deployment Plan, Physical Site Preparation, Part A.

Note: The CCE State Network Server Deployment Plan Guide is on the website <http://helpdesk.itc.nrcs.usda.gov/newsflash/>.

CCE Electrical Requirements Worksheet

USDA Site ID: _____ USDA Service Center Name: _____

Street Address: _____ City, State, ZIP: _____

Start Date: _____ Completion Date: _____

PROJECT BACKGROUND

It is the goal of the Common Computing Environment (CCE) server acquisition solicitation to provide a network server to each USDA and Conservation District Office. The server will provide services to the entire office for email, print server, data storage, etc. The server will be maintained by the State IT Teams. In order to prepare the sites for the installation of the Uninterruptible Power Supply (UPS) that the servers will be connected to, the electrical requirements for the office will need to be assessed by a Certified Electrician to determine any needed changes. Sites will coordinate needed changes with the State CCE IT Team. Installation of the dedicated circuit must be completed prior to the server installation.

RESPONSIBILITY

The State CCE IT Team consists of employees from the three Service Center Agencies. State CCE Teams will assign a State Point of Contact who will coordinate the installation of the required circuit with the Site Coordinator. The Site Coordinator will coordinate the following requirements with the Landlord/Lessor and the Electrician.

Electrical Requirements

- **Dedicated Circuits** - dedicated circuits will be required for use by the Uninterruptible Power Supply (UPS). Only equipment listed in the CCE Server Installation Guide will be connected to the dedicated circuit. Under no circumstances are printers to be connected to this circuit.
- **Circuit** - will be 120 volt, 30 AMP minimum with true earth ground, terminated into a twisting-lock receptacle. Each dedicated circuit must have insulated, isolated earth ground, conduit ground is not acceptable.
- **Receptacle** - will be a NEMA L5-30R twist-locking receptacle (see Figures 1 & 2 below for plug and receptacle).
- **Location** - the receptacle will be located in the ADP/Computer or common area in the office where the LWV cabinet is installed. The receptacle will be located within a maximum of 4.5 feet from the back of the cabinet.

Figure 1

Illustrated to the right is a 30AMP plug (NEMA L5-30P) which has three prongs.



Figure 2

Illustrated to the right is a 30AMP receptacle (NEMA L5-30R). After inserting the plug into a 30A receptacle (NEMA L5-30R), twist it slightly to ensure a solid connection.

